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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

H0005288

First Inventor

ESKRIDGE, MARK H.

Title

Flip Chip Bonded Micro-Electromechanical System

Express Mail Label

ER502985394US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application
Commissioner for Patents
P. O. Box 1450
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.
See 37 CFR 1.27.

3. ☒ Specification [Total Pages **32**]
(preferred arrangement set forth below)
- Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure

4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **4**]

5. Oath or Declaration [Total Pages **2**]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Title Page / Return Receipt Postcard (2x)
Two (2) Credit Card Payment Forms

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____

Prior application information:

Examiner _____

Group / Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

Customer Number:

00128

or ☐ Correspondence address below

Name	Timothy M. Carlson (Reg. No. 38,095)			
	Honeywell International, Inc.			
Address	101 Columbia Road, Law Department AB2			
City	MORRISTOWN	State	NEW JERSEY	Zip Code
				07962
Country	USA	Telephone	425-885-8509	Fax
				425- 885-8797

Name (Print/Type)

CHARLES J. RUPNICK

Registration No. (Attorney/Agent)

43,068

Signature

Date

03/18/04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

22763 U.S. PTO
031804

22856 U.S. PTO
10/804609

031804

031804

22763 U.S. PTO

**FEE TRANSMITTAL
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

\$846.00

Complete if Known

Application Number	new app. (EXP. MAIL ER502985394US)
Filing Date	March 18, 2004
First Named Inventor	MARK ESKRIDGE
Examiner Name	not assigned
Art Unit	not assigned
Attorney Docket No.	H0005288

METHOD OF PAYMENT (check all that apply)☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None☐ Deposit Account:Deposit
Account
NumberDeposit
Account
Name

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☐ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	770.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$)

\$770.00

2. EXTRA CLAIM FEES FOR UTILITY AND

Extra Claims		Fee from below	Fee Paid
Total Claims	22 - 20** = 2	X 18.00 =	36.00
Independent Claims	3 - 3** = 0	X 0.00 =	0.00
Multiple Dependent		0.00 =	0.00

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\$36.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non - English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR § 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Statement	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	40.00
1809 770	2809 385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

\$40.00

SUBMITTED BY

Name (Print/Type) CHARLES J. RUPNICK

Registration No.
(Attorney/Agent)

43,068

Complete (if applicable)

Telephone (253) 859-9128

Signature

Date

MARCH 18, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on

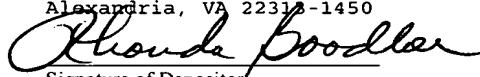
This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below in an envelope as "Express Mail Post Office to Addressee" mailing Label Number **ER502985394US** addressed to:

Commissioner for Patents
Alexandria, VA 22313-1450



Signature of Depositor

Rhonda Goodloe

Print Name of Depositor

Date: March 18, 2004

IN THE UNITED STATES

PATENT AND TRADEMARK OFFICE

Attention: Mail Stop New Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of:

Inventor(s): **ESKRIDGE, Mark H.**

For: (Title): **FLIP CHIP BONDED MICRO-ELECTROMECHANICAL
SYSTEM (MEMS) DEVICE**

1. Type of Application

This new application is for a(n)

- ☒ Original (nonprovisional)
- ☐ Design
- ☐ Divisional
- ☐ Continuation
- ☐ Continuation-In-Part (CIP)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121).

- ☐ The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

3. Papers Enclosed**A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application**

27 Pages of specification
1 Page of Title Page
4 Pages of claims
4 Sheets of drawings (Figs. 1-9)

- ☐ The enclosed drawings are photographs(s).
☐ The enclosed drawings are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWINGS" are attached. 37 C.F.R. § 1.84 (a)(2) AND § 1.84 (b).
☒ formal
☐ informal

B. Other Papers Enclosed

2 Pages of declaration and power of attorney
1 Pages of abstract
 Request for Non-publication of application
x Other (Return Receipt Postcards (2x))

4. Additional papers enclosed

- ☐ Amendment to claims
☐ Cancel in this application claims before calculating the filing fee. (*At least one original independent claim must be retained for filing purposes*).
☐ Add the claims shown on the attached amendment (*Claims added have been numbered consecutively following the highest numbered original claims*).
☐ Preliminary Amendment
☐ Information Disclosure Statement (37 C.F.R. § 1.98)
☐ Form PTO-SB08
☐ Citations

5. Declaration or Oath (including Power of Attorney)

- ☒ Enclosed
☒ Executed by the inventors
☐ Joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
☐ This is the petition required by 37 CFR §1.47 and the statement required by 37 CFR §1.47 is also attached.
☐ Not enclosed

6. Inventorship Statement

The inventorship for all the claims in this application are:

- ☒ The same
☐ Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,
☐ is submitted.
☐ will be submitted.

7. Language

- ☒ English

8. Assignment

- ☒ An assignment of the invention to
HONEYWELL INTERNATIONAL, INC.

☒ is attached.
A separate ☒ COVER SHEET FOR ASSIGNMENT
(DOCUMENT) ACCOMPANYING NEW PATENT
APPLICATION or ☐ Form PTO 1595 is also attached.
☐ will follow.

- ☐ This is a ☐ continuation ☐ divisional application and
the assignment document for the parent application
_____/____ was filed _____ as Reel____,
Frame ____.

9. Certified Copy

Certified copy(ies) of application(s):

Country	Appln. No.	Filed
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from which priority is claimed

- ☐ is (are) attached ☐ will follow.

10. Fee Calculation (37 C.F.R. § 1.16)

A. ☒ Regular Application

CLAIMS AS FILED			
Number Filed	Number Extra	Rate	Basic Fee 37 CFR. §1.16(a) \$770.00
Total Claims (37 CFR § 1.16(c)) 22-20=	2	X \$18.00	\$ 36.00
Independent Claims (37 CFR § 1.16b)) 3-3=	0	X \$86.00	\$ 0
Multiple dependent claims (37 CFR § 1.16) (d))		+ \$290.00	\$ 0

- ☐ Amendment canceling extra claims is enclosed.
☐ Amendment deleting multiple-dependencies is enclosed.
☐ Fee for extra claims not being paid at this time.

FILING FEE CALCULATION: \$806.00B. ☐ Design application

(\$330.00 - 37 C.F.R. § 1.16(f))

FILING FEE CALCULATION: \$ _____

11. Assertion of Small Entity Status

- ☐ Applicant hereby asserts status as a small entity under 37 C.F.R. § 1.27.

Filing Fee Calculation (50% of A, B, or C above).

\$ _____

12. Fee Payment Being Made At This Time

- ☐ Not enclosed.
☐ No filing fee is to be paid at this time.
☒ Enclosed

☒ Filing Fee: \$806.00
☒ Recording Assignment
 (\$40.00; 37 C.F.R. § 1.21 (h)) \$ 40.00

TOTAL FEES ENCLOSED: \$846.00

13. Method of Payment of Fees

- ☐ Check in the amount of \$_____.
- ☐ Authorization is hereby made to charge the amount of \$_____ to Deposit Account No. _____.
A duplicate of this transmittal is attached.
- ☐ Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.
- ☒ To Credit Card as shown on the attached credit card information authorization form PTO -2038.

14. Authorization to Charge Additional Fees

- ☐ The Office is hereby authorized, (in the manner shown above), to charge the following additional fees by this paper and during the entire pendency of this application to Account No.:
- ☐ 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
- ☐ 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
- ☐ 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
- ☐ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a)).
- ☐ 37 C.F.R. § 1.17 (application processing fees)
- ☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b)).

Date: March 18, 2004

Phone: 253-859-9128

Fax: 253-859-8915

Customer No. 00128



SIGNATURE OF ATTORNEY

CHARLES J. RUPNICK
Reg. No. 43,068

24722-104th Avenue, S.E.
Suite 102
Kent, Washington
98030-5322

☐ Incorporation by reference of added pages

- ☐ Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed

Number of pages added: _____

- ☐ Plus Added Pages for Papers Referred to in Item 4 above.

Number of pages added: _____

- ☐ Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.

Number of pages added: _____

- ☐ Plus "Assignment Cover Letter Accompanying New Application"

Number of pages added: _____

☒ Statement Where No Further Pages Added

- ☒ This transmittal ends with this page.